A. Project Title and Project Purpose Statement:

Project Title: Building a Resilient Community

Purpose Statement: ICC will work comprehensively to address climate resiliency, through a combination of resident engagement and targeted interventions that build off of green neighborhood assessments already undertaken or underway. Both the physical resiliency of the Ironbound will be addressed, but also the social resiliency of Ironbound residents will be strengthened.

Location: The project will take place in the Ironbound section of Newark, NJ, which entails all of zip code 07105 and a portion of zip code 07114.

Environmental Statutes: Clean Air Act, Clean Water Act, Safe Drinking Water Act, Solid Waste Disposal Act, and Toxic Substances Control Act

B. Environmental, Public Health, and Community Climate Resiliency Information about the Affected Community:

"The Ironbound" neighborhood is located in the East Ward of Newark in Essex County, New Jersey. It is roughly four square miles east of Newark's Pennsylvania Station, bounded by highways (Routes 1 & 9, 21, 78, NJ Turnpike), waterways (Passaic River, Newark Bay), the Newark Airport and Port Newark/Elizabeth. The Ironbound gets its name from the rail tracks that once surrounded the area on three sides. The community currently has a population of more than 50,000 people and is one of the most densely populated areas of the city. Our community is extremely diverse, composed of Portuguese and Spanish speakers and African American residents, with two-thirds of the population being foreign born. The Ironbound has three public housing complexes, with over 700 units, in which 75% of the residents are African American and low income. These public housing complexes are all in extremely close proximity to industrial land uses and hazardous sites like the Diamond Alkali Superfund site and highways like the New Jersey Turnpike. Educational attainment levels are relatively low with 55% of those over 18 without a high school diploma. Census tracts in our neighborhood range from 25% - 55% of households below the poverty level.

Disproportionate Impacts & Environmental Burdens:

- According to the Toxic Release Inventory in 2004, more than 150,000 lbs of emissions
 which includes 56 toxic chemicals including hydrazine, benzene, and mercury, were
 released from 23 facilities in the Ironbound (37 total in Newark, NJ).
- The community's zip code contains over 300 major air permits and over 700 air permits from small stationary sources.
- The state's largest solid waste incinerator is located in the community. It burns close to 1 million tons of waste annually, with more than half of the waste transported from New York City and coming in on diesel trucks. The plant emits close to 200lbs of mercury annually and ICC has concerns about the impacts of air emissions from the plant.
- Major highways, including the NJ Turnpike, bring thousands of vehicles through the area and are a significant source of mobile emissions compounding the air pollution burden.

- In 2013, a mid-March truck counting campaign from six intersections near homes, parks, and schools yielded 2,769 trucks in two hours of counting.
- Conservatively, there are 10,000 truck trips emanating daily from Port Newark and Elizabeth along with docked ship emissions and on-dock diesel equipment.
- Newark Liberty International Airport contributes air emissions and noise pollution from hundreds of airplane landings and takeoffs and vehicular traffic to and from the airport.
- Newark is out of compliance with the National Ambient Air Quality Standards for carbon monoxide, ozone and particulate matter. Of these pollutants, by far the worst air quality problem in Newark is ground-level ozone and PM which exacerbates respiratory illnesses. A statewide study (using 1995 and 2001 data) showed that Essex County had the highest asthma related mortality rates in the state with a doubling of the rates within minority populations. The 2006 report from Kids Count found that 27% of Newark children have been diagnosed with asthma and it is the single most common reason for school absences in the Newark School District.
- The most dioxin-contaminated site in the world, the Diamond Shamrock Superfund site is located less than a quarter mile from a public housing complex with 400 families
- The Passaic River is so polluted by dioxins and other chemicals that people are prohibited from fishing or swimming. The River is also severely impacted by combined sewer overflows which is exacerbated by the high levels of impervious surfaces. Many residents use the river for subsistence fishing and the riverfront is home to many low income residents living in public housing. There is a fish advisory in effect on the river which cautions and prohibits the consumption of fish and in particular blue claw crabs due to contamination.
- There are more than 100 brownfield sites in the Ironbound community. Many of the homes in the Ironbound are built atop former industrial sites and were approved for residential development with restricted use remedies such as a cement cap to contain pollutants, but many uninformed owners or tenants break these caps to plant gardens. There are also many large vacant brownfield sites close to recreational and residential areas that have the potential to blight and contaminate the surrounding areas.
- Lead contamination and poisoning are a major environmental and public health problem in the community. In Newark, 8.2 percent of children tested had elevated blood lead levels which are double the state average. Many of the soils including those we will be reclaiming through our greening projects have elevated lead levels and are blighted lots that are underutilized.
- The Ironbound has the lowest levels of tree canopy coverage in all of Newark with less than 5% tree coverage in the Ironbound, contributing to the urban heat island effect in our area. Our area is on average 3-5 degrees hotter in the summer than surrounding towns.
- The Ironbound has the lowest per capita recreation space in the state with less than a 1/2 acre of recreation space per 1000 residents.

In addition to all of these challenges, the night of October 29th, 2012 brought an entirely different challenge to the Ironbound: Superstorm Sandy. As in many communities, Sandy overwhelmed the Ironbound section of Newark with flood surges from the highly polluted Passaic River and

Newark Bay. Numerous low and moderate income households, many of these undocumented, lost wages and income as well as suffering significant damages. The most affected area was the neighborhood commonly referred to as the "island", a distinct neighborhood on the bank of the Passaic that includes heavy industry, brownfield sites, low-income housing projects, and working class homes. The Passaic River itself is a Superfund site, strewn with dioxin and other contaminants. Subsequently, waters that flooded homes in this area brought with them contaminants as they flowed from the river, through industries, including a sewage plant, and into homes. ICC was the first responder to over 800 residents. Our initial work included advocacy and coordination with the USEPA and the NJDEP as well as other agencies, such as FEMA. Since then, we have moved from emergency assistance to ongoing support for families who have lost homes and property to the storm, by assisting with the rehabilitation of the damaged homes themselves and by advocating for equitable buy-outs through NJ's Blue Acres program that gives homeowners pre-storm value for their homes, moves them away from floodprone areas, and leaves behind permanent green space. Our on-going work with residents and small businesses has included, not only advocacy, repairs to homes, and services for families, but also resiliency planning and emergency preparedness.

The proposed project will address these environmental justice and resiliency issues through a combination of planning, strategic interventions, and resident engagement. Specific benefits from our project for the affected community include:

- This project will physically make the Ironbound more resilient through targeted intervention that address issues such as air emissions, urban heat island effect, contaminated land, and flood.
- The project will also make the Ironbound's people more resilient by cultivating community leaders that will serve as first responders in the face of another disaster like Sandy.

C. Organization's Historical Connection to the Affected Community

Since the 1970s, ICC has been among the most active grassroots environmental voices in New Jersey. With the discovery of numerous hazardous waste sites, Superfund sites, and proposals to develop additional pollution-generating facilities, ICC organized residents around environmental justice issues in the community. ICC has been instrumental in working with residents to prevent further citing of polluting industries and has worked with residents to develop grassroots plans and designs for land use and planning purposes. ICC has served as a community representative on the New Jersey Department of Environmental Protection's Environmental Justice Advisory Council (EJAC) since its inception in 1996. ICC has also operated various environmental projects including a brownfields job training initiative, asthma education and prevention, fish consumption advisories and cumulative impacts and air quality reports, etc. More recently, ICC has deepened its environmental efforts by integrating critical areas of land use planning and environmental policy advocacy. With the support of a USEPA CARE grant, ICC convened residents and stakeholders in a two year process to identify and prioritize critical environmental issues related to environmental justice and cumulative impacts in our community. Since then we have worked towards implementation of many aspects of that CARE plan which included prioritizing greening projects that would benefit – Clean Air, Clean Water and contribute to overall quality of life and resiliency in the community.

ICC has always worked closely with residents to reach mutual goals. We believe that residents speak for themselves and many of our leaders and staff members are from the community as well as more than half our board members are residents. Our grassroots approach means that we base our work in the empowerment and privileging the residents' voices and active engagement. ICC assisted residents to organize the Ironbound Committee Against Toxic Waste in 1980 to promote clean ups, pollution source reduction and environmentally-safe development. In 1989, ICC organized the Clean Sludge Coalition, a regional organization of citizen groups promoting a beneficial use management policy for New Jersey's clean sewage sludge. Since 2000, ICC has been working with residents on several planning projects in an effort to address development pressures and prevent further environmental problems and in 2000, residents and ICC developed the Ironbound Community Master Plan. Today, we work with residents on EJ issues through a whole host of programs and projects, including our Clean Air Committee, a group of dedicated local residents who advocate for clean air in their neighborhoods. Residents lead efforts in our community gardens and in our community centers through resident led steering committees. We also have active environmental education programming for residents that is geared towards raising consciousness about the issues that our neighborhood faces. ICC runs environmental justice programming for high school students, community gardening for elementary and middle school students as well as senior citizens, and greening and clean-up events open to the whole community. Through our strong partnerships with schools we have recently expanded our work with youth and the environment, in order to encourage the next generation of EJ activists.

In all of ICC's work, community members are essential and at the core of all our decision making processes. Residents comprise many of our on the ground staff and leadership on our Board. Residents are also leading efforts already with the existing community gardens and Clean Air Committee, which are standing committees with active resident participation and leadership. The ideas to expand our work on greening efforts and creating a learning lab was generated by community members already active in our work and from the increased interest from other residents wanting to participate and engage young people as well. The design and implementation of this proposed project is premised on linking together residents and environmental professionals in an effort to share information and collaborate on projects that can leverage both sets of expertise – the local and the professional. The community members will be driving the design and implementation of this project from the beginning and their leadership will be critical to ensuring the success of the project in the long term.

ICC's Environmental Justice & Community Development Department prides itself on building capacity through raising community awareness through workshops and educational programming for residents of all ages, and turning awareness into action through campaigns that protect our environment. By creating opportunities not just for learning but also for physical, hands on improvements in the neighborhood we ensure that residents have more of a direct investment and connection to the ways in which their local environment impacts their health and wellbeing. We also empower residents to link these physical projects to the broader environmental and political issues that impact their lives and give them the tools they need to take action on multiple scales. One great example of this is the Clean Air Committee, a group

of residents who have been meeting since 2008. Several of the committee members are health affected because of the high levels of air pollution in the Ironbound. With the support of ICC's Environmental Justice Organizer, the group takes an active role in educating the community on air quality issues. Clean Air Committee members have frequently spoken out at City Hall when polluters threaten our community and they have enrolled children in asthma study programs and informed their neighbors about the impacts of diesel and asthma. In 2010, the group coordinated with other Newark residents to block a medical waste treatment plant and an animal crematorium that were slated for construction within a mile of each other, close to homes and schools. The more capacity building we are able to do in our community, the more we are able to accomplish as an organization.

We maintain and sustain the relationships with our community's residents through constant engagement in standing committees, meetings, workshops and through our community organizing and outreach efforts on an ongoing basis. ICC also has three community centers, one early education center, featuring two programs, and two afterschool programs throughout the community, where we host a variety of educational programming and informative forums for adults. We also host a variety of educational programming and informative forums for adults, have environmental education programming for children all year round, and reach out to residents and inform them of pertinent environmental issues that arise. Lastly, we have an Environmental Justice Resource Center at the local Newark Public Library where we provide educational opportunities to learn about the long history of activism and current issues impacting our community.

D. Project Description

ICC will work comprehensively to address climate resiliency, through a combination of resident engagement and targeted interventions that build off of green neighborhood assessments already undertaken or underway. This work will build off of existing efforts and bring together a diverse cross-section of stakeholders. In all instances, this project will be grounded in maximizing the participation and voice of Ironbound residents. When advancing this project, ICC will convene both neighborhood steering committees for advancing the green neighborhood assessments. These committees will include residents, representatives from public, private, and nonprofit sectors, as well as experts in various program areas, including: housing, labor, arts and culture, the environment, transportation, economic development, and others.

A green neighborhood assessment was created for the East Ferry section of Ironbound, in the fall 2014, and a similar assessment will be created for the South Ironbound in spring 2015. The assessments include, or will include, recommendations for implementation and ideas on how to make homes, businesses, and schools more sustainable and less susceptible to climate change impacts. They optimize community-driven problem solving, planning and implementation and, as mentioned above, involved a diverse group of stakeholders from the private, public, and nonprofit sectors, and especially, neighborhood residents. The assessments give particular emphasis to options that create ongoing local jobs and a skill base to achieve the desired climate change resiliency, as well as significantly reduce greenhouse gas emissions, the heat island effect, and adverse health and other impacts associated with climate change. They look to integrate green infrastructure elements into business district design, streetscapes, greenways and buildings in the neighborhoods, as well as flood "buffer and absorber" techniques such as

permeable pavements (or, the removal of impermeable cover), rain barrels, cisterns, green roofs, tree planting and greenscapes, gardening and other strategies to improve on-site water infiltration, conservation and safe reuse. They will look at nutrient recycling (composting) in community gardens, backyards and businesses to enhance soil quality and its water absorption for sustaining vegetation and food production. Rather than starting from scratch, ICC considered applicable models that already exist and have been implemented in other U.S. cities, such as LEED for Neighborhood Development and Eco-Districts. The East Ferry plan was conducted by Natural Resources Defense Council and funded by Greater Newark Local Initiatives Support Corporation. The South Ironbound planning effort, funded as part of a Kresge Foundation initiative, will use the best practices learned in the East Ferry initiative and may include assessment metrics, such as equitable development and green building, health and food, neighborhood identity, transportation and mobility, energy, water, habitat and ecosystem function, and materials management.

In conjunction with the green neighborhood implementation work, social resiliency will also be strengthened amongst residents in the Ironbound, which will serve as a model for other neighborhoods city-wide and in other environmental justice communities in the state and region. Building social resiliency entails recognition of organizational structures that facilitate plan formation, feasibility and implementation, and periodic adaptation as necessary. This work will entail building on disaster preparedness and response plans, with communications tools, that ICC has already created. These plans include media packets, maps, emergency kits, brochures and flyers in Spanish, Portuguese, and English that are all easily understood. Plans have been shared with the Newark Office of Emergency Management and then incorporated into the City's Long Term Emergency Preparedness Plan. All materials will also be available online via social media and websites.

Building on this work, residents would be trained as block captains, who can help their neighbors in times of need and help refer neighbors to appropriate resources. The goal is to have a block captain in every block in Ironbound. Block Captains will serve as added support to an existing structure, with a two-fold role. Prior to an emergency, the Block Captain will disseminate information on what to expect in the disaster and how to best prepare themselves. Secondly, they will act as an information gatherer for their area and report findings to both Ironbound Community Corporation & the Newark Office of Emergency Management during an emergency. They also will help distribute information and emergency supplies to neighbors during a disaster and ensure that everyone on their block is safe and knows where to go resources. Beyond disasters, Block Captains will become community advocates overall and be able to fight against environmental injustices by reporting bad odors to the NJDEP and reporting code violations to the City of Newark, amongst other neighborhood burdens.

ICC's Community Resiliency Coordinator, Michael Molina, will serve as overall project manager for the initiative, including managing the implementation of resiliency interventions that come out of the green neighborhood plans. Michael will also coordinate the training of block captains. Daniel Wiley, ICC's Community Organizer, will work in partnership with Michael and lead the resident engagement and outreach for these efforts.

This project relates to the Clean Air Act, Clean Water Act, Safe Drinking Water Act, Solid Waste Disposal Act, and Toxic Substances Control Act through our comprehensive green neighborhood assessments that will lead to interventions in areas ranging from green space

creation to tree planting and green infrastructure, to green building and alternative energy. In regards to the Clean Air Act, ICC will look to combat urban heat island effect through increases tree canopy and also we look to identify new sources of alternative energy, while incorporating green building standards in real estate development projects undertaken by ICC or others in the neighborhood. ICC will also advocate for, and create green infrastructure pilot projects, in our neighborhood, thus linking to the Clean Water Act as well. In regards to the Safe Drinking Water Act, at numerous community meetings, residents brought up drinking water quality and ICC will work to ensure that drinking water meets or exceeds US EPA standards. ICC will also work towards the clean-up of brownfield sites throughout the neighborhood, thus linking to the Toxic Substances Control Act as well.

E. Organizational Capacity and Programmatic Capability

ICC is led by an Executive Director who has been with the agency for 20 years in this position and has overseen the consistent growth of the agency. ICC's Chief Financial Officer heads an Accounting Department that manages more than 50 grants and contracts, including federal grants from the Department of Health and Human Services and the US Environmental Protection Agency, state grants from the Departments of Education and the Department of Environmental Protection, and city grants such as Community Development Block Grants (CDBG) and the Neighborhood Stabilization Program (NSP2). Our various program directors have decades of leadership experience in their respective fields, including our Environmental Justice & Community Development Director who lives in the Ironbound Community. Our success in developing and operating programs for more than four decades is reflected in independent evaluations, grant and contract renewals, clean annual audits, national awards and accreditations, and long-standing collaborations and partnerships. We have successfully managed several US EPA grants and cooperative agreements through close tracking of our stated outcomes and milestones. To effectively manage and complete the proposed project we will be doing weekly staff check-ins, keeping a monthly activity log and events calendar, tracking evaluation measures for stated outputs and outcomes, and reporting on all stated performance measures in a timely fashion. ICC has consistently met all reporting requirements both for progress reports and financial status in a timely fashion for our past US EPA grants:

- 1. In 2013, we received the EPA EPA EJ Small Grant, Program Officer, Terry Wesley; Award Number EQ 96290813
- 2. In 2012, we received the Urban Waters Small Grant, Program Officer Cyndy Kopitsky; Award Number UW 96298912
- 3. In 2011, we received the EPA EJ Small Grant, Program Officer, Terry Wesley; Award Number EQ 97206311
- 4. In 2011, we received the Children's Environmental Health Grant, Program Officer, Kathy Seikel; Award Number CH 83511701
- 5. In 2010, we received the US EPA Brownfields Area Wide Planning Grant; Program Officer, Aimee Storm; Award Number TR 83491001
- 6. In 2009, we received the US EPA CARE level I grant, Program Officer, Nikolaus Wirth, Region 2; Award Number, RE 97233101-0

F. Qualifications of the Principal Investigator or Project Manager

Michael Molina joined ICC in 2013 as Community Resiliency Coordinator and has been a lifelong Newark resident. This includes growing up and attending elementary school in the Ironbound. Before ICC, Michael earned his bachelor's degree Cultural Anthropology from Rutgers University. At Rutgers, he became very engaged in learning local cultures and identifying community and residential needs by assisting them in problem solving and providing technical assistance. This has proven beneficial to his time at ICC, where he has worked closely with Sandy survivors in identifying the best resources for recovery, developed disaster preparedness resources, advocated for resiliency measures in a community full of environmental and climate justice issues, and developed green neighborhood, resiliency plans.

G. Past Performance in Reporting on Outputs and Outcomes

ICC has an excellent track record of reporting outputs and outcomes for all our federal grants and cooperative agreements. We have consistently met our stated outputs in a timely fashion as part of our previous 2 EJ Small Grant Projects, as well as our Urban Waters grant, Children's Environmental Healthy grant, Brownfields Area-Wide Planning grant, and our EPA CARE level I project. We have asked for extensions of the EJ Small grant to wrap up our work on the greening initiatives undertaken in that project and have met or exceeded the stated project outcomes. We have produced the necessary quarterly reports for all the grants listed below with both a narrative description of progress updates as well as a report of progress in a matrix formatted with our milestones, outcomes and outputs. We have been able to achieve our stated outcomes to date. We have closed out all grants successfully, with the exception of our last EJ Small Grant, which will be closed out shortly as well having successfully completed those project goals. The following are the relevant federal grants and cooperative agreements:

Award	Title	Amount	Years	Contact
#				
EQ 96290813	Growing Green for Environmental	\$30,000	9/2013-	Terry Wesley
	Justice		8/2015*	
UW 96298912	Passaic River Education &	\$60,000	10/2012-	Cyndy
	Outreach Project		9/2014	Kopitsky
EQ 97206311	Ironbound EJ Gardening &	\$25,000	10/2011-	Terry Wesley
	Greening		9/2013*	
CH 83511701	Early Education & Environmental	\$100,000	10/2011-	Kathy Seikel
	Health in Newark, NJ		3/2013	
TR 83491001	East Ferry Street	\$175,000	10/2010-	Aimee Storm
	Neighborhood Brownfields		12/2012	
RE 97233101-0	Ironbound CARE Cumulative	\$100,000	10/2009-	Nikolaus Wirth
	Impacts Project		9/2011	

^{*}We have received an extension for these projects, but have completed all project milestones and outputs

H. Quality Assurance Project Plan (QAPP) Information

This project does not involve the use of existing environmental data or the collection of new data.